

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC. 20554**

**In the Matter of**

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	)	
<b>Co-Primary Allocation</b>	)	<b>RM-10166</b>
<b>of 2300-2305 MHz</b>	)	
<b>to the Amateur</b>	)	
<b>Radio Service and</b>	)	
<b>the Miscellaneous Wireless</b>	)	
<b>Communications Service</b>	)	

**To: The Commission**

**COMMENTS of Nickolaus E. Leggett  
N3NL Amateur Radio Operator**

The following are comments from Nickolaus E. Leggett, an amateur radio operator, inventor, patent holder, and a certified electronics technician.

I am opposed to the petition of AeroAstro, Inc. because it will have significant negative impacts on amateur radio operation in the 2300-2305 MHz band.

This proposed “co-primary” allocation would result in a significant reduction of the capability of the Amateur Radio Service. Very large numbers (millions) of low cost spread spectrum devices would be authorized in the band. The cumulative effect of all these devices will increase the noise floor on the band and make it very difficult for amateurs to hear the weak signal stations that they are attempting to contact.

In addition, the proposed reduction in the power limit for amateur radio terrestrial communications from 1.5 KW PEP to 25 Watts EIRP would limit the range and experimental options available to amateurs. For example, communications over a mountain ridge using

knife-edge diffraction are greatly assisted by using higher power. Other unusual propagation modes are also assisted by high power use.

Similarly, reducing the power of amateur radio Earth-Moon-Earth communication to 100 Watts will greatly cripple these moonbounce experiments. Earth-Moon-Earth communication typically uses high power to a high gain antenna. Limiting this communication to 100 Watts will limit Earth-Moon-Earth communication to amateurs who have very large antennas indeed. Most amateurs cannot build such large antennas because of restrictive covenants and/or zoning laws. In addition, limiting amateur Earth-Moon-Earth to only CW and SSB emission blocks amateur experimentation and invention with new digital modes on the moonbounce path. This is a negative impact because these digital modes would probably be more compatible with various types of digital signal processing for signal reception. As an inventor myself, I am strongly opposed to being shut out of the digital frontier on this radio band. In this regard, it should be remembered that amateur radio is a primary means for independent inventors to work with radio technology.

A primary allocation for amateur radio only is needed so that the amateur operators will not be displaced from this frequency band by the growing pressure of commercial interests such as AeroAstro. The Miscellaneous Wireless Communications Service (MWCS) already has an allocation on 2305-2320 MHz and AeroAstro can establish their system within that frequency band. In addition, the Commission should be reminded that Congress is concerned about the auctioning off of amateur radio spectrum to commercial interests. This concern is reflected in the bills before the House and Senate: HR.817 and S.549.

Respectfully submitted,

**Nickolaus E. Leggett**  
**N3NL Amateur Radio Operator**  
**1432 Northgate Square, Apt. 2A**  
**Reston, VA 20190-3748**  
**(703) 709-0752**  
[nleggett@earthlink.net](mailto:nleggett@earthlink.net)

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A copy of these comments has been sent to AeroAstro by USPS first class mail:

Mr. Mitchell Lazarus  
Fletcher, Heald & Hildreth, P.L.C  
1300 North 17<sup>th</sup> Street, 11<sup>th</sup> Floor  
Arlington, VA 22209